

**REMARKS**

This Amendment is submitted in response to the Examiner's Action mailed May 18, 2004, with a shortened statutory period of three months set to expire August 18, 2004. Claims 1-30 are currently pending. With this amendment, claim 1 has been amended.

Applicants have amended the specification to add serial numbers of related applications and to remove attorney docket numbers.

The Examiner objected to the title stating that it is not descriptive. The title has been amended. Thus, this objection is believed to be overcome.

Applicants have amended claim 1 to describe storing data management information in the metadata and storing data management rules and processing rules in the metadata. The method is a method for managing data. One example of support for these amendments can be found in the specification on page 8, line 29, through page 9, line 5. This section of the specification states that the management information is associated with data units.

Applicants claim providing a data element that includes metadata within the data element. One example of support for this amendment can be found in the specification on page 9, line 26, through page 10, line 1. Applicants claim storing data management information in the metadata where the data management information is for managing the data element. One example of support for this amendment can be found in the specification on page 11, line 26, through page 16, line 25. In particular, one example of support can be found on page 14, lines 22-23. Applicants also claim storing, within the data element, one or more anchor points to begin selected analysis processes. One example of support for this amendment can be found in the specification on page 10, lines 18-19.

The Examiner rejected claims 1 and 22 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 5,960,451 issued to *Voigt*. This rejection is respectfully traversed.

Claim 1 has been amended to describe a data element that includes metadata within the data element. Data management information is stored in the metadata. The data management information is for managing the data element. One or more anchor

points are stored within the data element. Data management rules and processing rules are stored in the metadata.

The Examiner states the *Voigt* teaches data elements by teaching logical storage units (LUNs). Thus, if the Examiner is correct and an LUN is analogous to Applicants' data element, then the LUN must include metadata within the LUN itself. Nothing in *Voigt*, however, teaches the LUN including metadata. Therefore, *Voigt* does not anticipate Applicants' claims.

The Examiner states that *Voigt* teaches metadata by teaching data including management information such as that found in RAID management system 56. The data found in the RAID management system 56 is not described by *Voigt* as being metadata that is included in the LUN itself. Nothing in *Voigt* teaches a LUN including metadata. *Voigt* does not describe, teach, or suggest a data element that includes metadata within the data element. Therefore, *Voigt* does not anticipate Applicants' claims.

Applicants also claim data management information being stored in the metadata where the data management information is for managing the data element. If the Examiner is correct and an LUN is analogous to Applicants' data element, the LUN must include metadata in which is stored management information for managing the data element. *Voigt* teaches the administrator module 46 provides management functions such as diagnostics and performance review. Column 4, lines 36-40. "The host computer 22 provides an interface from an administrator to configure the memory space in the RAID system and run diagnostics, evaluate performance, and otherwise manage the RAID storage system." Column 4, lines 14-17. Although *Voigt* does discuss management functions, nothing in *Voigt* describes management information that is stored in metadata that is included in the LUN. Further, nothing in *Voigt* teaches storing data management information in the metadata where the data management information is for managing the LUN. *Voigt* does not describe, teach, or suggest storing data management information in the metadata where the data management information is for managing the data element. Therefore, *Voigt* does not anticipate Applicants' claims.

Applicants claim storing, within the data element, one or more anchor points. If the Examiner is correct and an LUN is analogous to Applicants' data element, the LUN must include one or more anchor points within the LUN itself. The Examiner states that

*Voigt* teaches one or more anchor points by teaching addresses holding programs for computing available capacity at column 5, line 66, through column 6, line 39. This section of *Voigt* does not teach storing addresses within the LUN. *Voigt* does not describe, teach, or suggest storing, within the data element, one or more anchor points. Therefore, *Voigt* does not anticipate Applicants' claims.

Applicants claim storing data management rules and processing rules in the metadata in the data element. Again, if the Examiner is correct and an LUN is analogous to Applicants' data element, the LUN must include metadata in which is stored data management rules and processing rules. The Examiner states that *Voigt* teaches data management rules and processing rules by teaching parameters/preferences such as physical capacity, number of storage disks, allocated capacity, characteristics of the RAID, percentage to be used at column 2, line 55, through column 3 line 2. *Voigt*, however, does not teach these parameter/preferences being stored in the LUN itself. *Voigt* does not describe, teach, or suggest storing data management rules and processing rules in the metadata in the data element. Therefore, *Voigt* does not anticipate Applicants' claims.

*Voigt* does not anticipate Applicants' claim 1. *Voigt* does not describe, teach, or suggest a data element that includes metadata within the data element, storing data management information in the metadata that is included in the data element, the data management information stored in the metadata being for managing the data element, storing within the data element one or more anchor points, or storing data management rules and processing rules in the metadata that is included in the data element.

Applicants' claim 22 describes a self-defining data element for enhanced data management and recovery, comprising a data portion, and a metadata portion, wherein the metadata includes management information including management rules and processing rules and one or more anchor points to begin selected analysis processes. Thus, claim 22 expressly claims the data element including a metadata portion. Claim 22 also describes the metadata that is included in the data element including management information including management rules and processing rules and one or more anchor points to begin selected analysis processes. Claim 22 has not been amended. For the reasons given above, *Voigt* does not anticipate Applicants' claim 22.

The Examiner rejected claims 2-21 and 23-30 under 35 U.S.C. § 103(a) as being unpatentable over *Voigt*. This rejection is respectfully traversed.

As described above, *Voigt* does not describe, teach, or suggest a data element that includes metadata within the data element, storing data management information in the metadata that is included in the data element, the data management information stored in the metadata being for managing the data element, storing within the data element one or more anchor points, or storing data management rules and processing rules in the metadata that is included in the data element. Therefore, *Voigt* does not describe, teach, or suggest these features in combination with the other features of claims 2-21 or 23-30.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



Lisa L.B. Yociss  
Reg. No. 36,975  
Yee & Associates, P.C.  
P.O. Box 802333  
Dallas, TX 75380  
(972) 367-2001  
Attorney for Applicants

(972) 385-8777